AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-94 (**Cancelled**).

95 (**Currently amended**). A method for controlling microbial or biofilm growth in a medium, the method comprising

mixing a nitrogen-containing compound selected from the group consisting of ammonium carbamate and ammonium sulfamate,

~~or a mixture of such compounds, said nitrogen-containing compound being a salt containing nitrogen both in the cation portion and in the anion portion thereof, selected from the group consisting of salts of the formula $Y^{x-}[NH_2R^3R^4]^+_x$, wherein x is 1 to 3, Y^{x-} is a basic form of an acid Y that contains at least one moiety selected from the group consisting of a primary amine moiety, a secondary amine moiety, an amide moiety, an imide moiety, a sulfamide moiety, a sulfimide moiety, and an amineimine moiety, and $[NH_2R^3R^4]^+$ is an acidic form of a base NHR^3R^4 wherein R^3 and R^4 are each independently selected from the group consisting of H and C_{1-8} alkyl, or R^3 and R^4, together with the nitrogen atom to which they are attached, form a 5- to 10-member heterocyclic ring optionally substituted by one or more groups selected from C_{1-6} alkyl, C_{3-8} cycloalkyl, halogen, hydroxy, $-OC_{1-6}$ alkyl or $-OC_{3-8}$ cycloalkyl,~~

and an aqueous solution of a hypochlorite oxidant to form a biocide,

wherein the molar ratio of ~~$[NH_2R^3R^4]^+$~~ said nitrogen-containing compound to said hypochlorite is at least 1:1, and

applying said biocide to said medium,

wherein said biocide has a pH of between 9.0 and 11.5 immediately prior to being applied to said medium, and

wherein said biocide is substantially free of any other essential compound.

Claims 96 - 98 (**Cancelled**).

99 (**Previously Presented**). A method according to claim 95, wherein the concentration of said hypochlorite oxidant in said aqueous hypochlorite oxidant solution immediately prior to mixing with said nitrogen-containing compound is not more than 24,000 ppm as total chlorine.

100 (**Previously Presented**). A method according to claim 95, wherein said nitrogen-containing compound or mixture thereof is in an aqueous solution at a concentration of 0.5-60% w/v prior to mixing with the hypochlorite oxidant solution.

101 (**Previously Presented**). A method according to claim 95, wherein said mixing takes place in a mixing chamber into and out of which there is a continuous flow of water during said mixing.

102 (**Previously Presented**). A method according to claim 95, wherein said hypochlorite oxidant is selected from the group consisting of alkaline and alkali earth metal hypochlorites, hypochlorite released to water from a stable chlorine carrier and hypochlorite formed *in situ* from chlorine gas, and mixtures thereof.

103 (**Previously Presented**). A method according to claim 95, wherein said hypochlorite oxidant is selected from the group consisting of lithium hypochlorite, sodium hypochlorite, calcium hypochlorite, magnesium hypochlorite and potassium hypochlorite.

Claims 104 - 105 (**Cancelled**).

106. (**Previously Presented**). A method according to claim 101, wherein the concentration of said hypochlorite oxidant in said aqueous hypochlorite oxidant solution prior to mixing with said nitrogen-containing compound is not more than 24,000 ppm as total chlorine, and said mixing chamber comprises a conduit through which water flows as said hypochlorite oxidant solution and the nitrogen-containing compound are mixed.

107 (**Previously Presented**). A method according to claim 106, wherein said solution of hypochlorite oxidant is prepared *in situ* in said conduit prior to addition of said solution of said nitrogen-containing compound to said conduit.

108 (**Previously Presented**). A method according to claim 95, wherein said nitrogen-containing compound is diluted prior to mixing with the hypochlorite oxidant.

109 (**Withdrawn**). A method according to claim 95, wherein said medium is pulp and paper factory process water.

110 (**Withdrawn**). A method according to claim 95, wherein said medium is cooling tower water.

111 (**Previously Presented**). A method according to claim 95, wherein said medium is waste water or reclaimed waste water.

112 (**Withdrawn**). A method according to claim 95, wherein said medium is a clay slurry.

113 (**Withdrawn**). A method according to claim 95, wherein said medium is a starch slurry.

114 (**Withdrawn**). A method according to claim 95, wherein said medium is a sludge.

115 (**Withdrawn**). A method according to claim 95, wherein said medium is soil.

116 (**Withdrawn**). A method according to claim 95, wherein said medium is a colloidal suspension.

117 (**Withdrawn**). A method according to claim 95, wherein said medium is irrigation water.

118 (**Withdrawn**). A method according to claim 95, wherein said medium is a medium containing strong reducing agents.

119 (**Withdrawn**). A method according to claim 95, wherein said medium is a medium having a high reducing capacity.

Claims 120 - 121 (**Cancelled**).

122 (**Previously Presented**). A method according to claim 95, wherein the concentration of said biocide immediately prior to being applied to said medium is from 1000 to 12,000 ppm expressed as total chlorine.

123 (**Previously Presented**). A method according to claim 95, wherein the concentration of said biocide in said medium, upon application of the biocide to said medium, is 0.5-300 ppm expressed as chlorine.

124 (**Previously Presented**). A method according to claim 95, wherein said biocide is effective within 1 hour of application to said medium.

125 (**Withdrawn-currently amended**). Apparatus for applying a biocide to a medium, comprising:

a nitrogen-containing compound reservoir containing a nitrogen-containing compound ~~or mixture thereof selected from the group consisting of:~~

~~salts of the formula $Y^{x-}[NH_2R^3R^4]^{+}{}_x$, wherein x is 1 to 3, Y^{x-} is a basic form of an acid Y that contains at least one moiety selected from the group consisting of a primary amine moiety, a secondary amine moiety, an amide moiety, an imide moiety, a sulfamide moiety, a sulfimide moiety, and an amineimine moiety, and $[NH_2R^3R^4]^+$ is an acidic form of a base NHR^3R^4 wherein R^3 and R^4 are each independently selected from the group consisting of H and C_{1-8} alkyl, or R^3 and R^4, together with the nitrogen atom to which they are attached, form a 5- to 10-member heterocyclic ring optionally substituted by one or more groups selected from C_{1-6} alkyl, C_{3-8} cycloalkyl, halogen, hydroxy, $-OC_{1-6}$ alkyl or $-OC_{3-8}$ cycloalkyl,~~ selected from the group consisting of ammonium carbamate and ammonium sulfamate,

a source of hypochlorite oxidant dilution having a concentration of between not more than 24,000 ppm as total chlorine,

and a mixing chamber operable to mix the dilution and the nitrogen-containing compound or mixture thereof in a molar ratio of nitrogen atoms in the nitrogen-containing compound to the hypochlorite of at least 1:1, to produce the biocide in the mixing chamber,

wherein said biocide has a pH of between 9.0 and 11.5 immediately prior to being applied to said medium, and

wherein said biocide is substantially free of any other essential compound.

Claim 126 (**Cancelled**).

127 (**Withdrawn**). Apparatus according to claim 125, wherein said source of hypochlorite oxidant dilution comprises a hypochlorite-containing reservoir containing a hypochlorite oxidant solution, and a diluter operable to dilute the hypochlorite oxidant solution to produce said hypochlorite oxidant dilution having a concentration of not more than 24,000 ppm expressed as total chlorine.

128 (**Withdrawn**). Apparatus according to claim 127, wherein said diluter and said mixing chamber are a single conduit which is adapted to dilute said hypochlorite oxidant prior to mixing with said nitrogen-containing compound or mixture thereof.

129 (**Currently amended**). A method for controlling microbial or biofilm growth in a medium, the method comprising

mixing a nitrogen-containing compound selected from the group consisting of ammonium carbamate and ammonium sulfamate, a bromide and an aqueous solution of a hypochlorite oxidant to form a biocide, ~~said nitrogen-containing compound being a salt of the formula $Y^{x-}[NH_2R^3R^4]^{+}_x$, containing nitrogen both in the cation portion and in the anion portion thereof, wherein~~

~~Y^{x-} is a basic form of an acid Y that contains at least one moiety selected from the group consisting of a primary amine moiety, a secondary amine moiety, an amide moiety, an imide moiety, a sulfamide moiety, a sulfimide moiety, and an amineimine moiety; and~~

~~$[NH_2R^3R^4]^{+}$ is an acidic form of a base NHR^3R^4 wherein:~~

~~R^3 and R^4 are each independently selected from the group consisting of H and C_{1-8} alkyl, or R^3 and R^4, together with the nitrogen atom to which they are attached, form a 5- to 10-member heterocyclic ring optionally substituted by one or more groups selected from C_{1-6} alkyl, C_{3-8} cycloalkyl, halogen, hydroxy, $-OC_{1-6}$ alkyl or $-OC_{3-8}$ cycloalkyl; and~~

~~x is 1 to 3;~~

and the molar ratio of ~~$[NH_2R^3R^4]^+$~~ said nitrogen-containing compound to hypochlorite is at least 1:1,

and applying said biocide to said medium, wherein said biocide has a pH of between 9.0 and 11.5 immediately prior to being applied to said medium, and wherein said biocide is substantially free of any other essential compound.

130 (**Currently amended**). A method according to claim 95, wherein said nitrogen-containing compound is ~~ammonium carbamate or~~ ammonium sulfamate.

131 (**Currently amended**). A method according to ~~claim 95~~ claim 138, wherein said nitrogen-containing compound is ammonium carbamate.

132 (**Previously presented**). A method according to claim 95, wherein said hypochlorite oxidant is sodium hypochlorite.

133 (**Currently amended**). A method according to ~~claim 95~~ claim 138, wherein said hypochlorite oxidant is sodium hypochlorite, said nitrogen-containing compound is ammonium carbamate and said medium is waste water or reclaimed waste water.

134 (**Previously presented**). A method according to claim 95, wherein said biocide has a pH of at least 9.5 immediately prior to being applied to said medium.

135 (**Previously presented**). A method according to claim 95, wherein said biocide has a pH of at least 10.0 immediately prior to being applied to said medium.

136 (**Previously presented**). A method according to claim 95, wherein said biocide has a pH of at least 10.5 immediately prior to being applied to said medium.

137 (**Previously presented**). A method according to claim 95, wherein said biocide has a pH of at least 11.0 immediately prior to being applied to said medium.